and a composition ratio of said thermosetting resin is set to 10 to 40 wt.% of said complex;

an average particle diameter of said graphite powder is set to a range of 15 to 125 μm, and

a surface roughness of at least a portion contacting an electrode is set to a range of Ra = 0.1 to 0.5 μm as measured by a surface roughness meter having a probe of a diameter of 5 μm.

7. (Twice Amended) A method of producing a separator for a fuel cell configured by molding a complex of graphite powder and thermosetting resin in which composition the ratios are set to 60 to 90 wt. % of graphite powder, and 10 to 40 wt. % of a thermosetting resin, and an average particle diameter of said graphite powder is set to a range of 15 to 125 μm, comprising the steps of:

cold molding said complex into a shape similar to a final molded shape at a pressure of 2 to 10 MPA forming thereby a preliminary molded member;

placing said preliminary molded member in a mold, to mold it into a final shape by applying a pressure of 10 to 100 MPa.

setting a surface roughness of at least a portion of said final molding member contacting an electrode to a range of Ra=0.1 to 0.5 μm as measured by a surface roughness meter having a probe of a diameter of 5 μm.